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A study to assess the knowledge and dietary intake of macronutrient and micronutrient among adolescent girls in selected schools of Udupi taluk, Karnataka with a view to develop an awareness programme.

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"ABSTRACT

This study sought to assess the knowledge and dietary intake of macronutrient and micronutrient among adolescent girls in selected schools of Udupi taluk, Karnataka with a view to develop an awareness programme. Using cross-sectional design, the study aimed to assess the knowledge related to macro and micronutrients and to compare the macronutrient and micronutrient intake of adolescent girls with recommended daily allowances values.

A demographic proforma, knowledge questionnaire, 24 hour dietary intake recall proforma was used to interview the adolescents and anthropometric measurement procedure was carried out to collect the data. The sample consisted of 422 adolescent girls of Upper Primary and Pre-University Colleges of Udupi Taluk was selected through random sampling technique.

The study revealed that majority of adolescent girls (65.2%) were in the age of 15 years, most of adolescent girls (82.9%) were Hindu, majority of adolescent girls (51.4%) were from rural area, 51.2% of adolescent girl's parent were graduate or postgraduate, majority of their parents (52.6%) were professional, 82.2% have heard about macronutrient and micronutrient.

Majority of adolescent girls (56.6%) got information through teachers, 83.4% of the adolescent girls were having regular menstrual cycle, 54.5% were taking nutrient supplements, majority (58.3%) of the subjects were having poor knowledge regarding macronutrient and macronutrient and only (1.2%) of the subjects were having good knowledge.

The study revealed that BMI for the age was corresponding low to age of adolescent girls when compared with WHO growth standard whereas Height for age that was corresponding to age of adolescent girls as compared with WHO growth standard.

Dietary intake of macronutrient among adolescent girls revealed that the mean intake of protein, fat and energy intake was (53.33gm/d, 47.89gm/d and 1693.33 kcal/d) respectively. The percentage of adequacy of protein, fat, energy and energy was 101.19%, 71.01%, 124.93% respectively.

Dietary intake of micronutrient among adolescent girls revealed that the mean intake of calcium, iron, zinc, folate, vitamin B6, riboflavin, niacin, vitamin C and thiamine was 642.86 gm/d, 9.74 gm/d, 1.97 gm/d, 165.39 gm/d, .36 gm/d, 1.17 gm/d, 9.3 gm/d, 37.03 gm/d and 1.32 gm/d respectively.

On categorization of percentage of adequacy into sub categories of adequacy of macronutrient and micronutrient showed that 23.1%, 37.9%, 43.8% of the adolescent girls were substantially excess in their protein, energy and fat dietary intake and majority 90.5%, 65.2%, 98.8%, 98.6%, 47.2% and 52.4% of the adolescent girls were substantially inadequate in iron, calcium, zinc, vitamin B6, riboflavin, niacin and vitamin C respectively.

Awareness programme was developed on macronutrient and micronutrient, its importance and implemented.

In conclusion the knowledge among majority of adolescent girls regarding macronutrient and micronutrient was poor, dietary intake analysis revealed that majority of the adolescent girls were having adequate macronutrient intake but fat intake of most of the adolescent girls was substantially excess whereas most of them were substantially inadequate in their

micronutrient intake. So, there is need for regular sensitizing programme at school and community level to avoid the adverse effect of its inadequacy.

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